

Discussion Paper No. 116

PROCESS STUDIES OF TOURIST DECISION MAKING

The Riches Beyond Variance Studies

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November 2008

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Abstract

We discuss the paucity of rich decision-making models in tourism. Following a review of decision-making approaches, in which we include the emerging paradigm of naturalistic decision-making, we find that the literature on tourists' decision-making is dominated by 'variance' studies of tourists' decisions by causal analysis of independent variables that explain choices by tourists. We contend that this is at odds with the ontology of decision-making as a process, a deeper understanding of which may only be generated through process studies of tourists' decision-making. This typically involves narrating the emergent actions and activities by which individual or collective endeavours unfold. We discuss the implications of this in the context of building and testing naturalistic models and simulations of tourists' decision-making.

Key words: Tourists' decision-making theories; Naturalistic decision-making; Variance studies; Process studies; Modelling tourist behaviours.

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1. Introduction

Tourism is a major socio-economic phenomenon involving an elaborate set of interactions between tourists, tour operators, governments and local communities. Despite tourism often being characterised as a relatively benign development option, arguably, it also has a disproportionately large environmental impact when compared to other everyday human activities (e.g., see Becken, 2008; Becken & Simmons, 2008). The effort to understand this phenomenon has naturally led to the development of models and more general accounts of tourists' behaviours which have then been used to inform various tourism stakeholders involved in managing tourists and their inevitable economic, social and environmental impacts (Decrop, 2006).

Tourists themselves can be understood or characterised in a number of ways. In one sense they are simply persons engaged in one activity amongst many others in a continuous biography (Strauss, 1993); in another they are *sui generis* and characterised as a unique form of life ('The Tourist'); yet again, they are subsumed under some other broad category of human behaviour such as in their role as consumers. The broad characterisation chosen becomes a starting point for theoretical accounts and modelling. Each starting point delivers a quite distinctive explanation, and a particular valuing of just what feature of the behaviour of tourists is salient and worthy of explanation.

It has long been noted that the bulk of early work in tourism characterised tourists as consumers or economic agents (e.g., Graburn & Jafari (1991) and other articles in the *Annals of Tourism Research*, Vol. 18, No.1). This no doubt stemmed from the practical concerns of the developing industry in a rapidly expanding sector of modern economies. As Jafari (1990) argued, this 'advocacy platform' (in which tourism is regarded as ideal activity with few negative impacts for destinations) that underpinned much tourism research soon led to the countervailing account of tourism that he termed the 'cautionary platform' (in which the negative consequences of tourism become evident especially in less developed countries). His hope was that, at the time, tourism studies would migrate through an 'adaptancy platform' (with the promotion of tourism that is better suited to bring about positive outcomes for destinations) eventually entering an era of the 'knowledge platform' in which ideology driven platforms would yield to a more scientific and objective basis for managing tourism.

Yet, the so-called ‘knowledge platform’ itself has numerous variants that, ironically, often have their own implicit account of the phenomenon studied (i.e. their own ontology). Most famously, scientific theories have often vacillated between empiricist and rationalist epistemologies which themselves favour, respectively, atheoretical (or even anti-theoretical) and theoretical (or realist) accounts.

An additional complication arises when theoretical accounts are further subdivided on ontological grounds. Harré & Gillett (1994), for example, have noted in relation to psychological theorising that there is a clear distinction between those accounts with an object-based ontology and those with an action- (or process-) based ontology. Understanding cognition, for example, can give rise to accounts that focus on thoughts or accounts that focus on (the process of) thinking. In the former, individuated thoughts exist within individual minds (as representations) and interact with each other. In the latter, thinking occurs within the context of the ongoing action of an agent as it interacts with its environment (which includes other agents) and ‘...knowledge is not something people possess in their heads but rather something people do together’ (Weick, 2002); there are no ‘thoughts’ outside this interaction.

Surprisingly perhaps, this distinction between object and process based ontologies is reflected in consumer behaviour inspired models of tourist decision-making. What has become clear in the study of the consumer behaviour of tourists is that tourism resists easy definition as a product (object) or service (process); each tourism experience makes use of a portfolio of products or services (although the service aspect usually dominates). Whilst *mass customisation* is well-established in the production of goods as varied as motorbikes and personal computers, and plays a role in the delivery of many service offerings (Pine, 1992), arguably in no other product or service is the customer as involved in the information search for and choices around their purchase than is the case in tourism (Decrop, 2006; Sirakaya & Woodside, 2005). Tourists’ decisions are complex, involving many sub-decisions, which occur continuously from prior to deciding ‘where to go’ through to ‘what are we going to do now we’re here’ and beyond (e.g., repeat visitation or recommendation to others). Many of the choices may be based on contextual ‘facts’ (e.g., climate, distance to destination), but many more are based on perceptions and evaluative judgements of relatively high risk decisions (arguably no-one really knows how ‘good’ their holiday is going to be until they are experiencing it).

The dominance of intangible factors in the make up of tourism as a mass-customised or portfolio product is problematic because the so-called ‘grand models’ of consumer behaviour (e.g., Engel, Kollat, & Blackwell, 1968; Gilbert, 1991; Howard, 1994; Howard & Sheth, 1969; Nicosia, 1966; Runyon, 1980 all cited in Sirakaya et al., 2005) do not systematically distinguish between tangible and intangible products and services. More fundamentally, in focusing upon tangibles and more easily accessible intangibles, many of these models conceptualise decision-making as a ‘simple’ input-output model, with decision processes conceived as a ‘black box’ between independent and dependent variables. Conceptualised thus, conventional theories commonly focus upon: identifying the factors that should logically be considered as part of the explanation of decision-making (that is ‘what?’); and deducing relationships between the factors (that is limited causality or ‘how?’). Such theories also attempt to explain ‘why?’ the factors are related, commonly through psychological, economic or social dynamics, but often such explanations are limited by methodological choices (e.g., the commonly cross-sectional or repeated cross sectional sampling of relevant populations). Furthermore, causation is often only dealt with proximally. Rarely are attempts made to look at distal causation. Compounding these limitations, conventional theorists seldom make genuine attempts to address the contextual limits of their theories and as a consequence fail to properly explain the meaning of their findings (Whetten, 1989). The difficulty that scholars working in this convention (of developing ‘universal’ rules) face is that they are often forced to trade-off between generality, simplicity and accuracy (Sutton & Staw, 1995), and the ‘price’ of the trade off in the search for theories consisting of ‘covering laws’ is often a lack of explanations of ‘how?’ and ‘why?’; as a consequence the resulting theories are often underdetermined (DiMaggio, 1995). Hence, it is arguable that conventional models of decision-making commonly lack or fail to fully address commonly accepted conventions of ‘good theory’ (Bacharach, 1989; Whetten, 1989).

In the terms discussed above, such models ‘collapse’ explanations into empiricist, atheoretical accounts that rely heavily on recent cross-sectional measures to enhance predictability. Allied with this tendency is a methodological and modelling preference for static measures of consumer attributes (the ‘what?’) as central to the development of a model.

In relation to tourist behaviour, there are good *a priori* reasons to suspect that models of this kind are unlikely to encompass the diverse processes involved in the production of many tourist decisions, even in those cases that appear the most straightforward. First, like much leisure behaviour (e.g., Iso-ahola, 1983; Neulinger, 1976), recreational travel is characterised

not only by the heightened risks associated with uncertainty of outcomes but also the uncertainty – or lack of clarity - that surrounds the supposed need or motive initially at play in the behaviour of the individual tourist. In some senses, the experience the tourist seeks is not only intangible but is often not even discernibly present for the tourist when travel behaviour begins. It is largely constructed *in situ*. As psychologists have long understood, there is an openness about behaviours such as exploration, play and curiosity in contrast to more obviously goal-directed intentional behaviours.

Second, such openness means that the final behavioural pattern is highly imprinted with qualities of the environment within which the behaviour develops. What is sought by a tourist is often initially underdetermined (or, simply, vague) and has a dynamic and shifting nature throughout an episode of travel which allows the environment to exert considerable influence on expressed behaviour. This is not to say that tourist decisions and behaviours are entirely arbitrary or random but that the causal processes generating them are not only responsible for the overall experience but they also reconstruct the motives (or intentional ‘targets’) of the travel episode as the trajectory of the behaviour unfolds.

Third, this openness of much tourist behaviour and decision-making combined with the role of the environment suggests that real time decisions will, in many instances, be experienced as ‘intuitive’, ‘spontaneous’ or ‘impulsive’ since they would not have been clearly articulated or prefabricated in consciousness. That experience, however, is not evidence that no judgments or decisions have occurred. As an increasing body of work on human decision-making from an evolutionary perspective has revealed (e.g., Gigerenzer & Selten, 2002), ‘gut instincts’ have their own logic. Moreover, such low-level and often very simple heuristics can generate behaviour that, in retrospect, appears surprisingly rational, complex and coherent.

To summarise, depending upon the particular kinds and categories of decision-making of concern, conventional consumer behaviour theories may often fail to offer tourism policy makers and industry actors a sufficiently illuminating picture of tourists’ decision-making. Especially in reference to the decision-making that contributes to such features of travel as the generation of reasonably open itineraries or selection of activities as they are encountered, we contend that some dominant models of tourist decision-making will lead to ineffective tourism policy, marketing and management practices (Ghosal, 2005).

Given tourism's socio-economic importance and increasing awareness of its impact upon the natural environment, this should be a matter of some concern. Hence, our research questions:

- a) *Are conventional models of tourism decision-making theoretically underdetermined?*
- b) *Are there alternative approaches for theorising about tourists' decision-making that might facilitate the development of more fully determined models?*

We aim to contribute to the tourism body of knowledge by critically appraising substantive normative and empirical literature on tourists' decision-making and by proposing an alternative approach for theorising about this phenomenon. That alternative seeks to address just those qualities of tourist decision-making and behaviour that have been most elusive in the context of existing models. More pragmatically, our intent is to offer a stronger theoretical base from which richly contextualised research concerning tourists' decision-making can be developed. This should enable policy makers to develop better informed policy and industry actors to improve tourism marketing and management practices.

In this article we briefly review the history of decision-making theory. We further develop the argument for taking a naturalistic process perspective to a considerable proportion of tourist decision-making as we review the nature and contribution of recent research in tourist decision-making. We outline the strengths of taking a strong process view and conclude with some thoughts on the implications of this for research in tourists' decision-making.

2. Six Moments in Decision-making Theory

Decision-making is a topic that spans psychology, economics, sociology and the management sciences, specifically consumer behaviour. Arguably the key issue in the study of tourists' behaviour (Sirakaya et al., 2005), the conventional view of decision-making is of a frequently occurring everyday cognitive *process* in humans. Defined by Yates (2001) as 'a process that leads to the commitment to an action, the aim of which is to produce satisfying outcomes', (an alternative view is that the process leads to adaptation of similar behavioural decisions) there are any number of analytical theories or models that attempt to explain this. Building on Svenson (1996) and Decrop (2006), we distinguish between six 'moments' of decision-making theory: *classical*, *prospect theory*, *bounded rationality* (including *incrementalism*), *contingent or adaptive*, *political*, *pragmatic* and *naturalistic*.

The *classical* concept of prescriptive, analytical decision-making (Edwards, 1954; Von Neumann & Morgenstern, 1944), used to investigate everyday decision-making processes, claims that people collect and analyse information, eventually selecting an optimal solution from a range of alternatives. They do so by evaluating the advantages and disadvantages of each possible outcome and then choosing the one most appropriate to achieve their desired objective. This decision is regarded as optimal (McDaniel, 1993), based on subjective expected utility.

However, in its original formulation classical decision theory does not allow for the deterministic limits of assumed ‘pure’ rationality. *Prospect theory* (Kahneman & Tversky, 1979) and, later, *regret theory* (Bell, 1982; Dembo & Freeman, 1998; Loomes & Sugden, 1982: 73-107) tackle these limits in accommodating the notions of risk or uncertainty in decisions. However, whilst this marked a step forward, it still failed to address the ‘mediating processes that lead to a decision’ (Decrop, 2006: 2).

What Simon (1955) recognised was that decision-making is bounded by limits on time, cognition and information. *Bounded rationality* (Cyert & March, 1963/1992; March & Simon, 1958) therefore allows offers a more realistic view in claiming that on the basis of their bounds, individuals make decisions that are ‘good enough’ rather than optimal; hence *satisficing* replaces optimisation (Simon, 1957). Related to this approach, *incrementalism* assumes similar constraints on decision makers’ rationality, but accommodates most humans’ natural conservatism, in claiming that decisions are made only where an alternative is definitively better than the status quo. Choice amongst such alternatives is characterised as ‘muddling through’ (Lindblom, 1959).

However, even this approach fails to accommodate the dynamics of decision-making, since the theory still does not deal with the processes mediating the decision. *Contingent* or *adaptive* decision-making (Payne, 1982; Payne, Bettman, & Johnson, 1993) allows for natural dynamics in solving problems, finding that individuals use a variety of problem solving strategies, depending upon personal traits or characteristic, and problem and social contexts. The fundamental choice, it is argued is based on either economic or cognitive bias (Decrop, 2006: 4). A specific variant of adaptive decision-making theory, the *political* decision-making paradigm (Pettigrew, 1973; Pfeffer, 1981) accommodates polity in decision-making, in that it recognises that most decisions are made in the context of groups. The model revolves around the resolution (or not) of tensions between groups (characterised by

identities or preferences) through power relations (Dunsire, 1986, 1993) and the formation of coalitions (Sabatier, 1988; Sabatier & Jenkins-Smith, 1993).

The arrival of postmodernism and its characteristic deconstructivist approach (Lyotard, 1984; Rorty, 1982), has arguably seen the arrival of a more *pragmatic* view of decision-making, and one that is arguably less cognitively bound or ‘cognitivist’ (Edwards & Potter, 1992; Potter & Wetherell, 1987) than its ‘predecessors’. The view is that there is no singular ‘reality’, that causality is often complex and not clear, and that intentions are poor behavioural signs; in short everything is context-dependent and socially constructed. An exemplar of this paradigm in decision-making theory is the garbage can model (Cohen, March, & Olsen, 1972), which accommodates real world uncertainty and ambiguity, through its use of metaphor, wherein

‘Problems, solutions, choice opportunities and decision makers are dumped and connected by time proximity ... almost any solution can be associated with any problem, provided they are evoked at the same time’

(Decrop, 2006: 4)

The sixth ‘moment’ of decision-making theory, *naturalistic decision-making*, is most closely associated with Klein (1998; see also Lipshitz, Klein, & Carroll, 2006). This paradigm has often been used in the study of real world decision makers, such as those operating in dangerous work environments (e.g., Ash & Smallman, 2008a; Ash & Smallman, 2008b). The principal contribution that naturalistic decision-making makes is in the derivation of detailed descriptions of the discourse surrounding and derived from processes through which and how individuals and groups make decisions, and the contexts within which such decisions are made. Whilst not overtly postmodern in orientation, the approach seeks to deconstruct decision-making through detailed analyses of discourse (Phillips & Hardy, 2002), narrative (Lieblich, Tuval-Mashiach, & Zilber, 1998) and social action (Strauss, 1993) by decision makers (Gore, Banks, Millward, & Kyriakidou, 2006). This implicit acceptance of the role of the discursive mind (Edwards et al., 1992; Harré et al., 1994; Moore, 2002) in decision-making represents a marked departure from more conventional decision-making research.

With the exception of the sixth ‘moment’ (and possibly the fifth), as we will see shortly, each of the decision-making paradigms are antecedents of much subsequent work in decision-making in tourism (Sirakaya et al., 2005) amongst other disciplines. Conventionally, in the context of tourism at least, the focus of this type of research is very much on tourist

destination choice, generally informed by ‘grand models’ of consumer behaviour (Sirakaya et al., 2005). The major variables in these models relate to socio-psychological processes (perception, cognition, learning, attitudes), personal variables (motivation and involvement, personality and self-concept, lifestyles, emotions), and environmental variables (social and cultural influences, interpersonal variables, situational influences - Decrop, 2006: 7-14).

3. ‘Wait a Moment’

Valuable though the five ‘first moments’ may be in telling us what factors matter prior to decision-making processes, we contend that the majority of studies that have gone before tell us very little about the processes themselves. Such ‘variance theories’ (Mohr, 1982) instead tells us about artefacts of decision-making by quantitatively representing decision outcomes as dependent variables, the statistical variations in which are explained by significant independent variables, based on an objective or entitative ontology. Explanations of behaviours are based on efficient or proximal causality.

As such, to paraphrase and adapt Poole, Van de Ven, Dooley, & Holmes (2000: 29):

‘While the variance approach offers good explanations of [decision-making] driven by deterministic causation, this is a very limited way to conceptualise [decision-making]. It overlooks many critical and interesting aspects of [decision-making] processes. However, because most ... scholars have been taught a version of social science that depends on variance methods, and because methods for narrative research are not well developed, researchers tend to conceptualise process problems in variance terms.’

It should be noted that neo-classic economic variance models are atheoretical in the sense that they avoid the specification of causal generative mechanisms. While cognitivist versions postulate cognitive mechanisms and internal information processes as generative mechanisms in this way they sidestep the interactive processes between the tourist (as agent) and the environments of decision-making. Static measures of ‘attitudes’, ‘perceptions’ and ‘values’ in effect become internalised proxies for these processes.

From the perspective of other important issues in social science, the ontology underlying the study of decision-making is abundantly clear. We cannot simply understand decision-making by studying final decisions (Svenson, 1979); decision-making is unquestionably a process wherein decision-makers’ heuristics and problem representations (cues) interact in the

creation of choice (Svenson, 1996), in a context that is ever changing and in flux (Rescher, 1996; Tsoukas & Chia, 2002; Van de Ven & Poole, 2005; Whitehead, 1929/1978).

Epistemologically, it is therefore reasonable to assume that decision-making should be represented as a narrative that captures a temporally ordered sequence of events; that is, decision-making should be represented through a ‘process theory’ (Mohr, 1982).

Process theories offer ‘rich’ explanations of complex events, take into account temporal factors and allow for dynamism in processes (e.g., Bacharach, Bamberger, & Sonnenstuhl, 1996; Elsbach & Sutton, 1992). Perhaps most critically, process theories offer much deeper explanations of causal processes, relationships and interactions (Dowe, 2004; Salmon, 1984) allowing researchers to ascribe material (that from which something was made), formal (the pattern from which it was made), efficient (that from which comes the immediate origin of the event) and final (the end for which it was made) causation (Aristotle, 1941; Ross, 1949 cited in Van de Ven et al., 2005).

Process theorists distinguish between ‘weak’ and ‘strong’ process theories (Tsoukas, 2005; Rescher, 1996: 2). ‘Weak’ theories are defined as such because substance has precedence over process, typically in the form of phasic analysis that attempts to explain state transformations over time. The ‘weakness’ lies in the focus on the state of an entity, rather than the transformative actions. ‘Strong’ process theories offer primacy to actions relating to phenomena such as sense-making, conflict resolution or (in the current context) decision-making as they unfold over time (Van de Ven et al., 2005).

4. Limits to Understanding?

In seeking answers to our research questions (particularly the question of theoretical underdeterminism), we undertook to analyse recent substantive research articles, both normative and empirical. Our particular focus was on the degree to which the works explained causality – the ‘why’ that is required of good theory. To do so we adapted Van de Ven et al's (2005) typology of approaches to studying organizational change, deriving a typology of approaches to studying tourist decision-making (see table one). The typology allocates studies to one of four approaches:

1. variance studies of tourists' decisions by causal analysis of independent variables that explain choices (dependent variable) by an entity;
2. process studies of tourists' decision-making narrating sequences of events, stages or cycles of decisions in choices made by an entity;
3. process studies of tourists' decision-making by narrating emergent actions and activities by which individual or collective endeavours unfold; and
4. variance studies of tourists' decision-making by dynamic modelling of agent-based models or chaotic complex adaptive systems.

Table 1
A typology of approaches to studying tourists' decision-making

		Ontology	
		A tourist is represented as being:	
Epistemology (Method for studying decision-making)	Variance method	A noun, a 'real' entity (entitative)	A verb, emergent, experientially processual
		Approach I Variance studies of tourists' decisions by causal analysis of independent variables that explain choices (dependent variable) by an entity	Approach IV Variance studies of tourists' decision-making by dynamic modelling of agent-based models or chaotic complex adaptive systems
	Process narrative	Approach II Process studies of tourists' decision-making narrating sequences of events, stages or cycles of decisions in choices made by an entity	Approach III Process studies of tourists' decision-making by narrating emergent actions and activities by which individual or collective endeavours unfold

Adapted from Van de Ven et al. (2005)

Approaches one and four, as variance studies are taken to view causation as 'proximal' or efficient, specifying the immediate causes of decision-making. Approaches two and three, as 'weak' and 'strong' process approaches (Tsoukas, 2005) deliver much richer explanation of causation of events. The weakness of approach two is attributed to its commonly historical approach and its habit of simplifying complex events. The strength of approach three lies in its direct observation and rich reporting of experiences. By nature of their explanation of causation, approaches one and four will always produce chronically underdetermined theories. Approach two offers a marked improvement in the identification of distal causation, but the explanatory power of such theories is undermined by over-simplification of complexity.

As with any scientific endeavour, under the doctrine of ontological relativism, for any collection of evidence there will always be many theories able to account for it (Quine, 1969), but, if the richest explanations of decision-making events lie in projects that follow approach three, then we argue that this is where we should be looking to improve our understanding of tourists' decision-making.

Approach

We used a keyword search on four bibliographic databases: ABI/Inform Proquest, Blackwell Synergy, Elsevier Science Direct and SpringerLink. On the basis that these offer coverage of the major tourism journals². We searched on the terms 'tourist decision-making' and 'vacation decision-making. We limited the search back to ten years, looking for substantive, well-specified studies. We identified 24 empirical studies and 16 conceptual or review pieces. To these we added further 33 contributions, identified by Decrop (2006) as being particularly influential in the development of tourist decision-making theory. In addition to analysing their approach and contribution, we classified the studies ontologically and epistemologically (in the case of review pieces we allocated them to an ontological class only).

Findings

Of the 16 conceptual or review pieces 10 have an implicitly or explicitly processual worldview and the other six an entitative approach (see table two). The common element in the 10 process-oriented pieces is that they deal with tourism in terms of space or time. In decision-making and the understanding of decision-making chronology is a central organising device (Zerubavel, 2003), and time ordering is fundamental element of process studies (Van de Ven et al., 2005). In tourism expressed in terms of travel itineraries so too must space be a central organising device for understanding the process of decision-making. The nine pieces take an implicitly strong processual approach in that they deal with the notion of tourists decision-making as emergent (that is socially constructed) and complex.

² The Australian Business Deans Council identifies the *Annals of Tourism Research*, the *Journal of Travel Research* and *Tourism Management* as 'first' tier internationally ranked journals in Tourism and Hospitality (available at <http://www.abdc.edu.au/download.php?id=76204,189,1>, accessed on 24 April 2008). Of these only the *Journal of Travel Research* is not indexed in the databases chosen. This was covered in a direct search of Sage Online. The majority of 'second' tier internationally ranked journals in Tourism and Hospitality are also covered in the databases we accessed.

Table 2
Overview of conceptual or review studies

<i>Authors</i>	<i>Major variables</i>	<i>Contribution</i>
Entitative Ontology		
Morley, 1992	Destination country Individuals' characteristics (income, time available, demographics)	Identifies sub-decisions of to travel or not, time and budget allocations, and choice of tour.
Papatheodorou, 2001	Expenditure and time constraints Prices Consumer preferences Quality Information Advertising Tourism agglomeration Competition	Consumer heterogeneity is a stylized fact; demand theory give a static view not allowing for the evolutionary nature of tourism products; the emergence of large consolidated tourism operators goes against classical demand theory. Proposes a discrete choice model based upon utility theory (relating to attractiveness and facilities).
Eugenio-Martin, 2003	Consumer behaviour Tourism studies Decision-making Families and family life	Identifies multiple factors involved in the tourists' destination choice. Individuals or families with exactly the same socioeconomic and demographic characteristics may choose very different destinations. Proposes a methodological framework for modelling a five-stage tourist decision-making process.
Sirakaya et al., 2005	Consumer behaviour theory Tourism behaviour Decision-making models Behavioural and choice-sets models	Identifies search issues for advancing understanding of tourism decision-making: the influence of tourism service characteristics on decision-making; risk reduction strategies and their influence on decision-making policies; the efficacy of choice sets in travellers' choice process; decision rules and their effect on choice behaviour; and underlying variables affecting choice behaviour.
Patterson, 2007	Older adults Tourism and travel Information sources Pamphlets Magazines Television	Deals with issues around tourism marketing in the older market.

<i>Authors</i>	<i>Major variables</i>	<i>Contribution</i>
<i>Table continues .../..</i>		
Litvin et al., 2008	WOM Word of mouth Word-of-mouth Online marketing Reference groups Opinion leaders	Describes online interpersonal influence, or eWOM, as a potentially cost-effective means for marketing hospitality and tourism, and discusses some of the nascent technological and ethical issues facing marketers as they seek to harness emerging eWOM technologies
Process Ontology		
Schmoll, 1977	Travel stimuli Personal and social determinants External variables (e.g., confidence in the travel agent, destination image) Characteristics of service distribution	Development of a sequential model of vacation decision-making framework: motivation (as a trigger); information search; evaluation of alternatives; and decision.
Mathieson & Wall, 1982	Awareness Desire Destination image	Identifies decision-making steps focused on <i>destination choice</i> , but also deals with subsequent decisions: 1. desire to travel; 2. information collection and evaluation; 3. travel decision; 4. preparation and experience; and 5. evaluation of satisfaction.
Goodall, 1991	Motivation Images Expectation Perception Preference	Distinguishes between the <i>vacation selection</i> process (through motivations and images formation) and <i>destination choice</i> (through a search process and the evaluation of alternatives). However, the distinction is ambiguous at best.
Mansfeld, 1993	Motivation; Information evaluation; Group decision-making	Steps leading to destination choice: 1. generic decision; 2. information search; 3. elimination and assessment of alternatives; and 4. actual choice.

<i>Authors</i>	<i>Major variables</i>	<i>Contribution</i>
<i>Table continues .../...</i>		
Gnoth, 1997	Motives Motivation Expectation Values Attitudes Emotions	Based on a discussion and operationalization of both the behaviorist notion of drive reduction and the cognitivist constructs of attitudes and values. While the satisfaction of inner-directed values and motivations depends on classes of objects, outer-directed values target specific objects. In the case of trying to meet the latter, planners need to follow specific parameters in their product design and resource management as they are expressed in tourists' motivations, whereas with the satisfaction of inner-directed values, planners can choose from substitutable products and product configurations.
Jenkins, 1999	Image	Different techniques for the measurement of a tourist's destination images are reviewed and the dominance of structured, word-based approaches is highlighted. Argues that to provide valid image research, a preliminary phase of qualitative research is important in order to distil the constructs relevant to the population being studied
Middleton & Clarke, 2001	Needs; Wants; Goals; Perceptions; Attitude	Uses a stimulus-response model to distinguish tourist choice between routines choices and extensive problem solving.
Moore, 2002	Discursive psychology Metaphor	Differentiates between broad socio-cultural tourism research and tourism as cataloguing and modelling of tourists' characteristics. The work goes on to construct a major theory of the discursive tourist, a vital element of which is the context in which they operate.
Lew et al., 2006	Behaviour Spatial movement Itinerary models Transportation planning	Proposes models depicting the spatial movement patterns of tourists within a destination. Developed using an inductive approach based on urban transportation modelling and tourist behaviour, to identify explanatory factors that could influence movements. Factors identified included a set of destination characteristics (trip origins/accommodation locations, trip destinations/attraction locations, transportation accessibility) and a set of tourist characteristics (time budgets, motivations, interests and composition, destination knowledge and emotional value) that influence decision-making and behaviour. These factors influence movement patterns in two ways, resulting in four types of territorial (no movement (tourist does not leave the accommodation property), convenience-based movement, concentric exploration, unrestricted destination-wide movement) and three linear path models (point-to-point patterns, circular patterns, complex patterns).
van der Duim, 2007	Tourismscapes Actor-network theory Modes of ordering Translation	Offers actor-network theory to develop the concept of 'tourismscapes', where people and things become entangled via complex processes of translation.

Of the six entitative pieces, one (Litvin, Goldsmith, & Pan, 2008) seems to be an implicit ‘throwback’ to the tradition of bounded rationality, in its focus on electronic word-of-mouth as an information source for intending tourists. A further five (Eugenio-Martin, 2003; Jenkins, 1999; Lew & McKercher, 2006; Morley, 1992; Patterson, 2007) follow the contingent or adaptive ‘moment’, in that they focus upon cognitive behaviours or traits and the natural dynamics of decision-making. Tourists’ choice is identified with economic or cognitive bias (or limits). The sixth (Sirakaya et al., 2005) is a wide-ranging review, which implicitly follows the ‘pragmatic’ paradigm, in that it accepts complex and unclear causality. On first reading, the study implicitly appears to be calling for a process approach to the study of tourist decision-making. However, closer reading reveals that whilst it recognizes the importance of decision-making heuristics, the authors fail to recognize the importance of time in understanding process.

Of the 32 empirical pieces, 26 use *Approach I* in the study of tourism decision-making, by causal analysis of independent variables that explain choices (dependent variable) by an entity (see table three). Descriptive, bivariate and multivariate statistical analysis of qualitative and, to a lesser extent quantitative, data is the dominant analytical strategy. The range of dependent and significant independent variables employed in the 19 Approach I studies is remarkable (see table four), as are the contributions. However, what we see is a breadth of variable focus on conventions of socio-psychological processes (perception, cognition, learning, attitudes), personal variables (motivation and involvement, personality and self-concept, lifestyles, emotions), and environmental variables (social and cultural influences, interpersonal variables, situational influences) (Decrop, 2006: pp 7-14). We still find out very little about the ‘creation’ of choice through the interaction of these variables, because the underlying ontology does not support the rich investigation of process.

Table 3: Overview of empirical studies

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
Approach I				
Rugg, 1973	Destination choice	Product characteristics Consumption technology Budget	Least squared regressions	Introduced three dimensions previously ignored: time constraint, transportation costs, and time costs.
Morley, 1992	Tour itinerary	Country of destination Individual characteristics (e.g., income, time available, demographics)	Experimental design, stated preference, data and discrete choice model.	Identifies relationships through decision to travel or not, time allocation and budget; and choice of tour.
Seddighi & Theocharous, 2002	Destination	Revisit intention Perceptions of product characteristics Personal characteristics	Logit analysis	Steps: 1. vacation or no vacation decision; 2. domestic or foreign destination decision; 3. abstraction - systems characteristics used as decision-making criteria; 4. aggregation – perceptions are transformed into a preference ordering; and choice.
Crompton, 1979; Um & Crompton, 1990; Um & Crompton, 1991)	Destination	Consideration sets Beliefs Attitudes Situational constraints	Longitudinal survey; quantitative analysis (<i>t</i> -tests)	Steps: 1. generic decision; and 2. destination decision (evolution from awareness to an evoked set, the choice from the evoked set).
Woodside & Lysonski, 1989	Destination	Destination awareness (consideration set); Preferences; Intentions; Situational variables; Choice	Survey; quantitative analysis (constant-sum approach)	Cognitive effects of destination decision.
Thornton, Shaw, & Williams, 1997	Percentage of time allocate to various holiday activities (e.g., eating, walking, sports, beach)	Presence of children Number of children Age of children	Space-time budget survey; descriptive and multivariate stats Diary-interview survey and content analysis	Group and age effects in tourism decisions.

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
<i>Table continues .../...</i>				
Vogt & Fesenmaier, 1998	Information need	Functional construct Hedonic construct Innovation construct Aesthetic construct Sign construct	Descriptive stats, Cluster analysis, Correlation, Regresion	Information needs in tourism decisions.
Zalatan, 1998	Tourism decisions	Initial trip tasks Financing tasks Pre-departure tasks Destination tasks	Descriptive stats, Regression analysis	Gender effects in tourism decisions.
Liu, 1999	Destination utility	Destination attractiveness Destination development Tourism 'basket model'	Descriptive stats, Regression analysis	Phasic analysis of destination utility built out of various factors
Jiang, Havitz, & O'Brien, 2000	Destination decision	Destination-oriented dimension Travel services dimension Social contact dimension	Factor analysis	Validates and extends a cognitively-based predictive scale of destination decision.
Money & Crotts, 2003	Information search Trip planning time horizons, Travel party characteristics (e.g.,size of group) Trip characteristics (e.g.,length of stay)	Uncertainty (or risk) avoidance	Not clear	Consumers from national cultures characterized by higher levels of uncertainty avoidance use information sources that are related to the channel instead of personal, destination marketing-related, or mass media sources; they also more frequently purchase pre-packaged tours, travel in larger groups, and stay on average a shorter time and visit fewer number of destinations. Contrary to expectations, they do not spend more time making the decision to travel or making their airline reservations.
Bansal & Eiselt, 2004	Destinations	Motivation, image of all regions and travel companions leading to Choice of region and then details planning	Descriptive stats	Development of model.
Mottiar & Quinn, 2004	Household decision of holidays	Gender	Descriptive stats	Largely a joint decision, but women have a dominant role in the early stages of the process, possibly making them the gatekeepers

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
<i>Table continues .../...</i>				
Kubaş, Yilmaz, Aktaş, & Metin, 2005	Frequency of visits to recreation areas	Motivational factors affecting the visits	Multinomial Logit Model	High direct correlation between the frequency of visits and motivational factors.
Nicolau & Más, 2005	Decision to go on holiday	Income Household size Education Size of the city of origin Opinion of going on holiday	Cognitivist – Heckit model	<ul style="list-style-type: none"> • An important finding of this analysis is the differentiated effect of a given dimension on each decision. The lack of information on some explanatory dimensions • The spending decision should be modelled jointly with the decision to go on holiday due to the dependency between them. • The promotion of destinations should be developed with special attention paid to some faraway markets of origin, due to the expected propensity for these tourists to spend longer periods at the destination. • The specialisation of destinations in terms of accommodation type and length of stay. • The design of holiday packages should be adapted to the needs of the tourists identified, as they represent the most profitable tourist profiles
	Level of expenditure	Distance between origin and destination Type of accommodation Income Household size Age Marital status Length of stay		
Bargeman & van der Poel, 2006	Routinization in decision-making	Extensiveness of decision-making process Internal and external information search (Type of) destination selected	Descriptive stats; Cluster analysis of qualitative data	Vacation decision-making processes of the interviewed households are much less extensive and far more routinized than described in the rational choice models.
Lam & Hsu, 2006	Behavioural beliefs → Attitude Normative beliefs → Subjective norm Control beliefs → Perceived behavioural control Past behaviour	Behavioural intention of choosing a travel destination	Descriptive stats; Structural equation modelling	Attitude, perceived behavioral control, and past behavior were found to be related to behavioral intention of choosing a travel destination

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
<i>Tables continues .../...</i>				
Molina & Esteban, 2006	Destination image formation Destination choice process Needs for information	Features of brochures	Descriptive stats, Regression analysis	The formation of destination image can be predicted by only two attributes of brochures: luring and sense of wonder. Important variables in brochure usefulness: incentives, visual (attractive) format, functional attributes, information attractiveness and content
Prentice, 2006	Opportunity awareness Consumer filters (Socio-demographics and income ↔ Preferences & credibility) → Evoked set – information & feelings as information (knowledge ↔ Familiarity ↔ imagery) → Action set (propensity or behavioural intentions) → Late awareness (new destination options)	Destination selection (Consumer situation variables → Visit)	Descriptive stats; Correlation	Operationalises discourses on affects-as-information in terms of destination imagining and choosing. Evoked sets are conceptualised not simply as destinations, but as destinations in terms of imagery, knowledge and familiarity; forming Unusual Selling Points (USPs) or their standardised equivalent, Standardised Selling Points (SSPs).
Tran & Ralston, 2006	Tourist preferences	Unconscious needs for achievement, affiliation and power	Canonical variance analysis	Two significant relationships were detected: one between the need for achievement and the preference for adventure tourism; and the other between the need for affiliation and the preference for cultural tourism
Beerli, Meneses, & Gil, 2007	Congruity between one's real-self concept and their image of tourists to the destination leading to choice of destination	Experience of tourist destination Involvement in leisure tourism	Descriptive stats, Factor analysis	The greater the agreement between a destination's image and one's self-concept, the greater the tendency for the tourist to visit that place.
Brey & Lehto, 2007	Vacation activity	Participation in similar recreational activity	Bivariate analysis, Segmentation (classification tree) analysis	Findings largely support the hypothesis that the more an individual is involved with a certain activity in a daily setting, the higher the tendency to participate in the same while at a destination.

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
<i>Table continues .../...</i>				
Murphy, Mascardo, & Benckendorff, 2007	Travel choice Behaviour in destination	Word-of-mouth	Descriptive stats, factor analysis, discriminant analysis	Compares four groups of respondents: those who indicated that they obtained travel information from friends/relatives and other travellers; those who obtained information from friends/relatives only; those who obtained information from other travellers only; and those who obtained information from neither (i.e. no WOM). Results indicate that there were significant differences across the four groups with respect to demographic characteristics, other information sources used, accommodation and transportation used, and travel activities in the destination. However, the groups did not differ in their image of the destination
Xia, Arrowsmith, Jackson, & Cartwright, 2008	Wayfinding	Levels of familiarity with the physical environment Pre-planned or unplanned itinerary Spatial and temporal scales encountered in the tourist visit Landmark utility	Case study	Discusses wayfinding as a cognitive psychological process. Highlights the need for tourist managers to understand that tourists use different methods of wayfinding and that management should provide complementary materials to assist in wayfinding.
Approach II				
Moutinho, 1980	Destination (a compulsory sub-decision amongst many)	Preference Decision; Purchase Dissatisfaction; Repeat-buying	Survey; quantitative analysis (facet theory + bivariate theory)	Steps: 1. tourism need arousal; 2. information search; 3. decision on different vacation items (including destination); and 4. travel preparation.
van Raaij & Francken, 1984; van Raaij, 1986	Any tourist product	Socio-demographic factors; Individual factors; Household factor	Meta-analysis of previous studies	Steps: 1. generic decision; 2. information acquisition; 3. joint decision making; 4. vacation activities; and 5. satisfaction or complaints.

Table continues .../...

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
Woodside & MacDonald, 1994	Destination; accommodation; activities; attraction; transportation; eating; self-gifts; other purchases	Consideration set; motives; information search; evaluation; intentions	Open-ended structured interviews; Cognitive mapping	Identifies that previous ‘models fail to capture the rich interactions of decision and behaviours of the travel party and the destination environment experienced by the travel party’. Develops a ‘general systems framework’ of tourist decision-making.
Larsen, Urry, & Axhausen, 2007	Not applicable	Not applicable	Narrative analysis	Shows that much tourism should no longer be seen as marginal and by implication “unnecessary”. Travelling, visiting, and hosting are necessary to social life conducted at-a-distance. Argues that research has neglected issues of sociality and corporeal copresence and thereby overlooked how more and more tourism is concerned with (re)producing social networks—with (re)visiting and receiving the hospitality of friends and kin living elsewhere and fulfilling social obligations. Documents how much tourism is not an isolated “exotic island” but a significant set of relations connecting and reconnecting “disconnected” people in face-to-face proximities where obligations and pleasures can go hand in hand. Qualitative-based scores gave evidence of being both congruent with and capable of being both congruent with and capable of delivering a clear distinct enunciation of what tourists think
Pritchard et al., 2006	Not applicable	Not applicable	Critical incident technique; Importance performance analysis using content analysis	
Approach III				
Teare, 1994	Accommodation	Product experience; Involvement; Evaluation; Joint decision-making	Participant observation or semi-structured interviews; grounded theory method	Prior product experience and product involvement are the core of the decision-making process. Tested 10 proposition based around this.
Decrop & Snelders, 2004	Not applicable	Not applicable	Grounded theory; Naturalistic analysis, ethnography	Presents a contextualized study of vacation planning starting from a naturalistic perspective. Vacation planning is an ongoing process, which entails a lot of adaptability and

Table continues .../...

<i>Authors</i>	<i>Dependent variable</i>	<i>Major independent variables</i>	<i>Methodology</i>	<i>Contribution</i>
Decrop & Snelders, 2005	Not applicable	Not applicable	Grounded theory; Naturalistic analysis, ethnography	opportunism. Fantasy and emotions also play an important role in shaping vacation and destination choices. Vacation decision-making is an ongoing process with a lot of contextual influences. Distinction made between six types of vacationers: habitual, rational, hedonic, opportunistic, constrained and adaptable
Woodside, MacDonald, & Burford, 2004	Not applicable	Not applicable	Storytelling; Grounded theory; Long interview method	Holistic case-based reviews of leisure travel decisions and tourism behaviour provides a rich, deep, nuance-filled understanding of the causes and consequences of such behaviours
Maoz, 2007	Not applicable	Not applicable	Ethnographic	Backpackers seem more diverse and multifaceted than ever, engaging in a variety of social and recreational activities and not being similar in motivations, national and cultural background, age, gender, and class. There appear to be differences among backpackers from different countries in their perception of freedom, escapism, and moratorium, in their travel motivations, as well as in their interactions with other tourists. This suggests that studies should refrain from regarding all backpackers as a single entity. Further studies of backpackers and other tourists could shed light on specific cultural backgrounds and their effect on patterns of traveling and their behavior and motivations.

Six pieces followed *Approach II* by studying tourists' decision-making through narrating sequences of events, stages or cycles and decisions in choices made by individuals or groups and individuals. Each used variants on narrative analysis to look at cognition in tourists' choices. Unfortunately one (Pritchard & Havitz, 2006) focuses on validating method rather than on findings, but each of these contributions illustrate the important role of looking at temporal sequence in tourists' choices. However, their focus is not on action, but arguably on states at various points in transitions. The richness required in understanding process is not present.

Five studies adopted *Approach III*, using ethnographic methods to conduct process studies of tourists decision-making by narrating emergent actions and activities through which individual or collective endeavours evolved. All three develop strong process theories of decision-making by tourists, not surprisingly stressing the individuality and irrationality of tourists' choices. Each of the studies stresses the importance of context in tourists' decision-making, stressing adaptability, opportunism and emotion. Each develops a 'rich' picture of the choice process that covers not only the key decision-making cues, but also the nature of their emergence through heuristics generated by individuals.

No studies were categorised as using *Approach IV*, attempting the exploration of tourist decision-making through dynamic modelling of agent-based models or chaotic complex adaptive systems. This is a pity since the use of this approach in exploring decision-making in other applications is well established (e.g., Axelrod, 1984, 1997; Bertels & Boman, 2001; Carpenter, 2002; Conte, Edmonds, Moss, & Sawyer, 2001; Gilbert & Terna, 1999; Harrison, Lin, Carroll, & Carley, 2007; Macy & Willer, 2002; Moss & Edmonds, 2005; Prietula, Carley, & Gasser, 1998; Rouchier, Bousquet, Barreteau, Le Page, & Bonnefoy, 2000)

In the tourism literature, variance studies (*Approaches I and II*) follow either a micro-economic or cognitive-structural approach. Demonstrating their roots in the neo-classic 'moment', micro-economic models fail to address issues around information asymmetry and irrationality in tourist choice. In particular, they do not properly account for the roles of emotion and experience in tourism. Cognitive-structural approaches focus on understanding tourists' choices through 'consideration sets', based around choice amongst alternatives or attributes. The approach looks at sequencing a limited number of cognitive, affective or behavioural variables. As with all variance approaches, the major issues are those of the reduction of innate complexity in decision-making, and the ignorance of the role of context (Decrop, 2006: 24-32).

In the tourism literature, the cognitive-structural models correspond to the weak process approach. They are highly conventional and fit well with the 'grand models' of consumer behaviour. However, they propose phasic models within singular decision-making hierarchies. They also tend to take a transactional view of time, focusing on significant events (actually the state of entities involved in events) from the point of view of the observer (not the decision-maker). Moreover, few of the models have been tested empirically (Decrop, 2006: 29, 38-39).

Apparently strong process models of tourist decision-making corresponding to the fifth post-modernist 'moment' of decision-making theory, have developed a view of 'interpretive' tourist decision-making that is naturalistic and experiential. These studies take a more richly conceptualized and complex approach, proposing expanded sets of factors in decision-making than has conventionally been the case. However, few choose to take a genuinely social-constructionist or genuinely strong process approach (Decrop, 2006: 39-43).

Variance, weak process and interpretive (which aspires to a strong process ethos) research conceptualises tourists' decision-making as an orderly process of discrete state transformations, with well-defined inputs and outputs. This conceptualization is founded in the various consumer behaviour models outlined previously and the first five moments of decision-making theory. Cognitive variants of such models, for example, rely explicitly on the technical definition of 'information' in information theory: a category of input necessary to change one (cognitive) state into another (cognitive) state. (e.g., Dickins, 2003, 2004).

Arguably the greatest failing of the conventional models is that they fail to acknowledge that tourists' decision-making is often focused on poorly-defined 'problems' in which there is considerable emotional 'capital'. Tourists' will have varying degrees of experience in such problem-solving, but not withstanding this, the conventional models are poorly suited to explaining how people make such choices. This is because they make an assumption of process-time ordering that may well be absent in all but a few cases.

Furthermore, much of the prior body of knowledge takes the individual as its level of analysis. Of course individuals do travel, but more often than not tourism takes place in a group context. As such, conventional decision-making research takes a purely teleological perspective in that it insists that decision-making theory should be solely concerned with 'purposeful enactment' by individuals.

Some research does deal with group theories, but effectively takes a multi-teleological approach, rather than dealing with decision-making as a dialectic that accommodates pluralism, confrontation or conflict (Poole et al., 2000: 66). More realistically, it seems to us that decision-making more often than not has dual levers in that it is about processes of conflict and synthesis between individuals in a group (Poole et al., 2000: 75).

A further fundamental issue with the conventional research lies in the definition of tourist products. Most studies deal only with a particular aspect (usually destination choice). Rare is the research that deals with choices made after the destination decision.

What we are seeking is a balanced approach. Rational variance research gives us information on context, but this needs to be balanced by process studies that enable us to identify decision-making heuristics. The need is to answer Richie's (1994) call (cited in Decrop, 2006: 45) for

'a comprehensive framework describing the many components and processes involved in tourist decision-making and taking into account the context in which decision are made.'

Here lies an opportunity to deploy lessons learned from the 'sixth moment'. The 'fit' of naturalistic decision-making with tourism is not immediately obvious, although at least one review has postulated the use of the approach in developing competences in tourism service recovery (Thwaites & Williams, 2006). Including this, the application of naturalistic decision-making thus far has been limited to individual and groups of professionals, which is to say communities of practice as distinct from 'non-professional' tourists. The paradigm also takes a strongly 'cognitivist' position in much of the reported work (it frequently refers to 'situated cognition'³), yet the outputs if the majority of studies are arguably socially constructed narratives of decision-making episodes, rich in heuristics and offering clear insights into process. This is because the data acquisition and analytical techniques commonly used in naturalistic paradigm implicitly position decision-making as an embedded social practice. Such embeddedness is visible only where data on decision-making interactions is analysed sequentially (that is in critical time order) as the decision emerges. Moreover, such approaches allow us to understand how decisions are socially constructed.

³ We understand 'situated cognition' to be a challenge to standard cognitivist theories (which are largely internalist – i.e., the processes occur in the mind/brain.) Situated cognition is more clearly social in that 'cognition' occurs in a social context or setting.

Consequently, naturalistic decision-making implicitly embodies the characteristics of the process approach.

5. A Process Perspective on Tourists Decision-Making

In Search of Riches

Whilst more recent work has begun to focus on decision-making processes (Engel, Blackwell, & Miniard, 1986) its value has been questioned (Crozier & McLean, 1997 cited in Sirakaya et al., 2005), not least since decision-making is highly individualistic. Tourists' decision-making it seems does not easily lend itself to the conventional derivation of grand theories. Consequently, if arguably, there is a pressing need to understand tourist decision-making from alternative theoretical perspectives (DiMaggio, 1995). A radical move would be to seek enlightenment through the development of critical theories of tourists' decision-making that are 'complex defamiliarizing and rich in paradox' (DiMaggio, 1995). However, theory resulting from such an approach seldom appeals to policy makers or managers and enjoys considerable notoriety associated with the impenetrable style in which many of its proponents choose to communicate (Smallman, 2006). Less radical, and arguably more relevant are narrative-based (or discursive) approaches to theorizing that are based in naturalistic accounts of social process or discourse, with an

'... emphasis on empirical tests of the plausibility of the narrative as well as careful attention to the scope and conditions of the account'

(DiMaggio, 1995: 391)

What such approaches allow is the derivation of decision-makers' heuristics, their effect upon choice behaviour and the influence of contextual factors upon these 'rules' and actions (Sirakaya, McLellan, & Uysal, 1996). Such approaches may never yield 'complete' or 'grand theories', but the act of theorizing in this manner (Weick, 1995) will afford the development of pragmatic models of behavioural processes of which we do not yet really have a complete grasp.

Relative to variance studies, process studies are less common in the tourism literatures. Partly this may be because they challenge entrenched approaches more generally in the social sciences. It may also be due to the accusation or lingering suspicion that they employ methods that are at best 'soft' (Lipshitz, Klein, Orasanu, & Salas, 2001; Denzin & Lincoln, 2000: 6-7) or at worst 'invisible,

incomprehensible, illegitimate or impractical' (Pfeffer, 1995 cited in Orton, 1997). However, lesser in volume though these accounts may be, the limited number we identified demonstrate the richness of data that can be generated in such work, by extracting the constituent process of decision-making rather than the inputs or artefacts of these processes. The studies also illustrate the fallacy that process studies lack rigour or value, in employing stringent data collection and analysis methods. As we have argued, in relation to 'value' these studies begin to address the very aspects of tourist decision-making that have been notoriously difficult to incorporate into standard models. The notion of rigour applies to the disciplined and thorough application of methods and analysis and these studies certainly demonstrate that in the context of the chosen methods. It is important not to conflate difficulties one may have with the output of a study, method or theory with the phenomenon that is its target. As Einstein famously said, 'everything should be as simple as possible; but not simpler' (Calaprice, 2000: 314). Current tourist decision-making models perhaps err on the side of simplicity.

Implications for Studying and Modelling Tourists Behaviour

Strong process (*Approach III*) studies open up our understanding of consumer-tourist decision heuristics, their effect upon choice behaviour and the influence of contextual factors upon these 'rules' and actions (Sirakaya et al., 1996), because they offer researchers the opportunity to narrate emergent actions and activities by which tourists' decision-making unfolds. Using these techniques it is feasible to identify different approaches to decision-making and the circumstances in which these apply. Because the unit of analysis is the tourist (rather than touristic or tourism artefacts), we may more easily see variations in decision-making across different tourist portfolios. A strong process approach accommodates both rationality and irrationality, because it makes no assumptions about the rationality of individuals. The focus of a strong process approaches is *process*, i.e. what is it the consumer does (not necessarily what information do they do it with)? Pragmatically, for the researcher it can also accommodate the analysis of different forms of data, and different approaches to data analysis (Langley, 1999; Poole et al., 2000; Van de Ven & Poole, 2002).

Finally, the strong process approach facilitates the development of contextualised behavioural simulations (Gilbert, 1999; Gilbert et al., 1999; Gilbert & Troitzsch, 2005), through identifying 'rules' and heuristics through which agent behaviours emerge in response to their experiences of contextual cues and the behaviour of other agents. Until now, the well-meant research in consumer-tourist behaviour has sought to simplify by removing context. These emerging approaches enrich

our understanding by celebrating and encompassing richly contextualised models of tourists' decision-making.

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